Atty. Dkt. No.: 5660-01102/EBM

## **Amendments to the Claims**

Please cancel claims 37-67 without prejudice.

The following listing of claims will replace all prior versions and/or listings of claims in the application:

## **Listing of Claims:**

1. (original): A model of dental caries, comprising:

an artificial tooth, wherein the artificial tooth comprises a cavity, and wherein the cavity comprises:

an opening that extends from an exterior surface of the artificial tooth to at least a simulated dentinoenamel junction of the artificial tooth; and

wherein the opening extends along at least a portion of the simulated dentinoenamel junction; and simulated decay material in the cavity.

- 2. (original): The model of dental caries of claim 1, wherein the opening contains simulated decay material.
- 3. (original): The model of dental caries of claim 1, wherein the opening comprises one or more grooves along the simulated dentinoenamel junction.
- 4. (original): The model of dental caries of claim 1, wherein the opening comprises one or more grooves, and wherein at least one of the grooves contains simulated decay material.
- 5. (original): The model of dental caries of claim 1, wherein the artificial tooth comprises resin.

Atty. Dkt. No.: 5660-01102/EBM

6. (original): The model of dental caries of claim 1, wherein the artificial tooth comprises

melamine resin.

7. (original): The model of dental caries of claim 1, wherein a surface defined by the cavity

is configured to bond to the simulated decay material.

8. (original): The model of dental caries of claim 1, wherein a surface defined by the cavity

is textured.

9. (original): The model of dental caries of claim 1, wherein a surface defined by the cavity

is textured with an etching solution.

10. (original): The model of dental caries of claim 1, wherein a surface defined by the cavity

is textured with an etching solution, and wherein the etching solution comprises an acid.

11. (original): The model of dental caries of claim 1, wherein the simulated decay material

comprises a resin material.

12. (original): The model of dental caries of claim 1, wherein the simulated decay material

comprises a porous substance.

13. (original): The model of dental caries of claim 1, wherein the simulated decay material

comprises a porous substance, and wherein the porous substance comprises pumice.

14. (original): The model of dental caries of claim 1, wherein the simulated decay material

comprises coloring.

15. (original): The model of dental caries of claim 1, wherein the simulated decay material

comprises food coloring.

3

Atty. Dkt. No.: 5660-01102/EBM

16. (original): The model of dental caries of claim 1, wherein the simulated decay material is

homogeneous.

17. (original): The model of dental caries of claim 1, wherein the simulated decay material is

curable.

18. (original): The model of dental caries of claim 1, wherein the simulated decay material is

light curable.

19. (original): The model of dental caries of claim 1, wherein the simulated decay material is

curable with visible light.

20. (original): The model of dental caries of claim 1, wherein the simulated decay material is

detectable by caries detecting stain.

21. (original): The model of dental caries of claim 1, wherein the simulated decay material is

radiolucent.

22. (original): The model of dental caries of claim 1, wherein the simulated decay material is

radio-opaque.

23. (original): The model of dental caries of claim 1, wherein the simulated decay material is

of uniform hardness.

24. (original): The model of dental caries of claim 1, wherein an outer layer of simulated

decay material is softer than an inner layer of simulated decay material.

25. (original): The model of dental caries of claim 1, wherein an inner layer of simulated

decay material has a greater hardness than an outer layer of simulated decay material.

4

Atty. Dkt. No.: 5660-01102/EBM

26. (original): A model of dental caries, comprising:

an artificial tooth, wherein the artificial tooth comprises a cavity, and wherein the cavity comprises:

an opening that extends from an exterior surface of the artificial tooth to at least a simulated dentinoenamel junction of the artificial tooth; and one or more grooves extending from the opening; and simulated decay material in the cavity.

- 27. (original): The model of dental caries of claim 26, wherein the opening contains simulated decay material.
- 28. (original): The model of dental caries of claim 26, wherein at least one of the grooves extends along at least a portion of the simulated dentinoenamel junction.
- 29. (original): The model of dental caries of claim 26, wherein at least one of the grooves extends along at least a portion of the simulated dentinoenamel junction, and wherein at least one of the grooves contains simulated decay material.
- 30. (original): The model of dental caries of claim 26, wherein the artificial tooth comprises resin.
- 31. (original): The model of dental caries of claim 26, wherein the simulated decay material is radiolucent.
- 32. (original): The model of dental caries of claim 26, wherein the simulated decay material is radio-opaque.
- 33. (original): The model of dental caries of claim 26, wherein the simulated decay material is of uniform hardness.

Atty. Dkt. No.: 5660-01102/EBM

34. (original): The model of dental caries of claim 26, wherein an outer layer of simulated decay material is softer than an inner layer of simulated decay material.

- 35. (original): The model of dental caries of claim 26, wherein an inner layer of simulated decay material has a greater hardness than an outer layer of simulated decay material.
- 36. (original): A method comprising:

forming a cavity in an artificial tooth, wherein the cavity comprises:

an opening extending from an exterior surface of the artificial tooth to at least a simulated dentinoenamel junction of the artificial tooth; and

wherein the opening extends along at least a portion of the simulated dentinoenamel junction; and applying simulated decay material to the cavity.

37-67. (cancelled)